

REMARKS

The above-identified application is United States application serial number 10/713,515 filed on November 11, 2003. Claims 1-12 and 29-39 are pending in the application and are rejected. Applicant respectfully traverses these rejections and submits that the features set forth in the claims are not disclosed, suggested, or obvious in view of the cited references and are directed to patent eligible subject matter.

Rejection of Claims Under 35 USC 101

Claims 1-12 and 29-39 are rejected under 35 U.S.C. 101 as being directed to patent ineligible subject matter. In response, claims 1 and 29 have been amended to include performing the claimed process elements in a computer system, thus meeting "the machine or transformation test" of the cited case *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (*en banc*), *cert. granted*, 129 S. Ct. 2735 (Jun. 1, 2009) (No. 08-964). Removal of the rejection of claims 1-12 and 29-39 under 35 U.S.C. 101 is respectfully requested.

Rejection of Claim Under 35 USC 103(a)

Independent claim 1 and dependent claim 9 are rejected under 35 U.S.C. 103(a) as being obvious over the publication entitled "Sonic Boom Minimization With Nose-Bluntness Relaxation" by Christine M. Darden, NASA Technical Paper 1349, pp. 1-51 (NASA 1979) (hereinafter "Darden") in view of Donald C. Howe, "Sonic Boom Reduction Through The Use Of Nonaxsymmetric Configuration Shaping", Gulfstream Aerospace Corporation, AIAA 2003-929 (2003), presented at 41st Aerospace Sciences Meeting and Exhibit, January 6-9, 2003, Reno, Nevada; or Yoshikazu Makino *et al.*, "Non-Axisymmetrical Fuselage Shape Modification For Drag Reduction Of A Low Sonic-Boom Airplane", National Aerospace Laboratory, AIAA 2003-557 (2003), presented at 41st Aerospace Sciences Meeting and Exhibit, January 6-9, 2003, Reno, Nevada.

Claim 1 as amended recites "relaxing a design constraint that requires the equivalent area distribution curve of the aircraft to be less than or equal to (\leq) the equivalent area distribution goal curve instead of equal ($=$) to the equivalent area distribution curve." In the

Decision on Appeal, the Board of Patent Appeals stated that the F-5 Shaped Sonic Boom Demonstrator is evidence that a person of ordinary skill would seek to both meet an ideal equivalent area distribution goal curve and to relax a design constraint. (Decision on Appeal dated November 17, 2009, last sentence on page 8 and continued on page 9). Applicant submits that the design constraint is the equivalent area distribution curve, not the shape of the fuselage as stated by the Board. (Decision on Appeal, page 9, lines 1-10). Prior designs were constrained to meet (be equal (=) to) the equivalent area distribution curve instead of less than or equal to (\leq) the equivalent area distribution goal curve as set forth in claim 1. The advantages of relaxing the constraint are explained on page 7 of the specification. (Specification, page 7, paragraphs [00018]-[00019]). None of the cited references disclose or suggest the features of claim 1. Independent Claim 1 is allowable for at least these reasons.

Claim 9 depends from claim 1 and is allowable for at least the same reasons as claim 1.

CONCLUSION

Applicant believes Claims 1-12 and 29-39 are in form for allowance and a notice to that effect is solicited. In the event it would facilitate prosecution of this application, the Examiner is invited to telephone the undersigned at (949) 350-7301.

I hereby certify that this correspondence is being transmitted to the USPTO, on the date shown below:

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January 18, 2010
(Date)

Respectfully submitted,

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